

Serial No. 10/043,312
Docket No. F-11890

REMARKS

Claims 1-21 are all the claims presently pending in the application.

It is noted that Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-2, 7-9, 14-16, and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent 5,581,475 to Majors. Applicant gratefully acknowledges the Examiner's indication that claims 3-6, 10-13, and 17-20 would be allowable if rewritten in independent format. However, Applicant believes that all claims are allowable over Majors.

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention, as described in, for example, claim 1, is directed to a method for revising wiring of a circuit to prevent electro-migration. For each net in the circuit, each branch point in the net is identified, and a current density at each branch point is calculated. It is then determined whether or not the current density exceeds a limit value and, if so, a wiring which affects the current density is automatically revised in order to reduce the current density.

Thus, the present invention provides the capability that an entire circuit can be checked and corrected without user interaction.

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II. THE PRIOR ART REJECTION

The Examiner alleges that Majors anticipates the present invention defined by claims 1, 2, 7- 9, 14-16, and 21. However, in spite of some arguable similarities, Applicant submits that the present invention is patentably distinguishable by reason of the plain meaning of the language of the independent claim. That is, Applicant submits that the present invention systematically and automatically checks and corrects the current density design aspects of an entire circuit by first identifying the branches from logical connection and physical connection information (e.g., lines 20-24 of page 7 of the specification), determining whether the design for each branch meets the current density requirement to avoid electro-migration, and automatically adjusting the design to correct those branches failing to meet the requirement (e.g., line 24 on page 8 through line 15 of page 9).

In contrast, Majors is based on user interaction to identify branch endpoints for checking out (e.g., lines 62-67 of column 10 of Majors) and to identify regions requiring the user's interaction (e.g., lines 14-22 of column 23).

Hence, turning to the clear language of the claims, in Majors, there is no teaching or suggestion for "...automatically revising a wiring which affects said current density in order to reduce said current density if said current density exceeds said limit value", as required by independent claim 1. The remaining independent claims have similar language.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggest by any of this prior art reference, and the Examiner is respectfully requested to withdraw this rejection.

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III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-21, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,



Date: 6/13/05

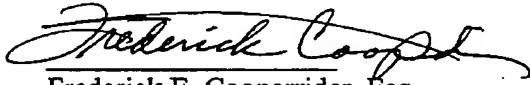
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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment by facsimile with the United States Patent and Trademark Office to Examiner Leigh M. Garbowski, Group Art Unit 2825 at fax number (703) 872-9306 this 13th day of June, 2005.


Frederick E. Cooperrider, Esq.
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